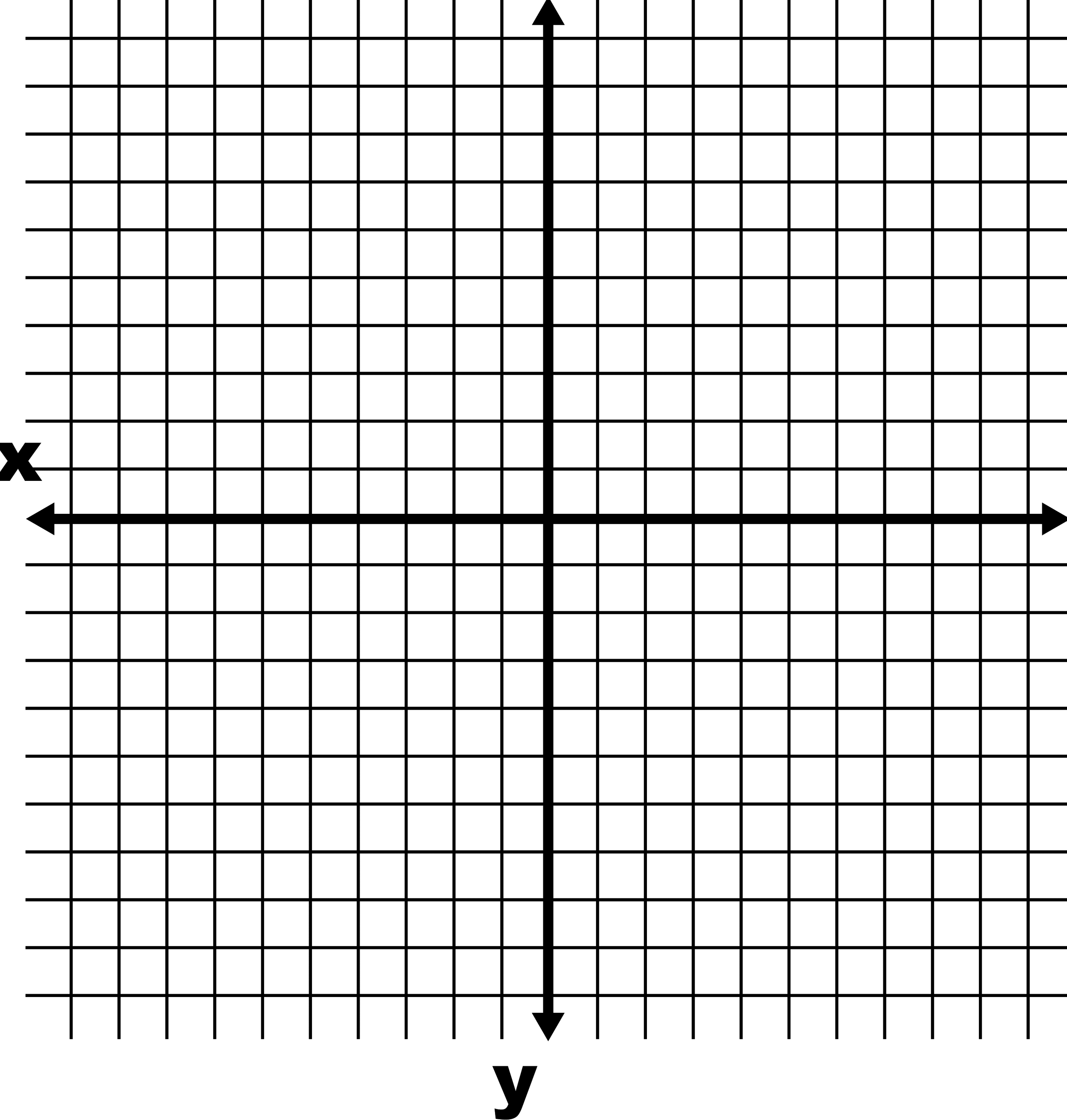
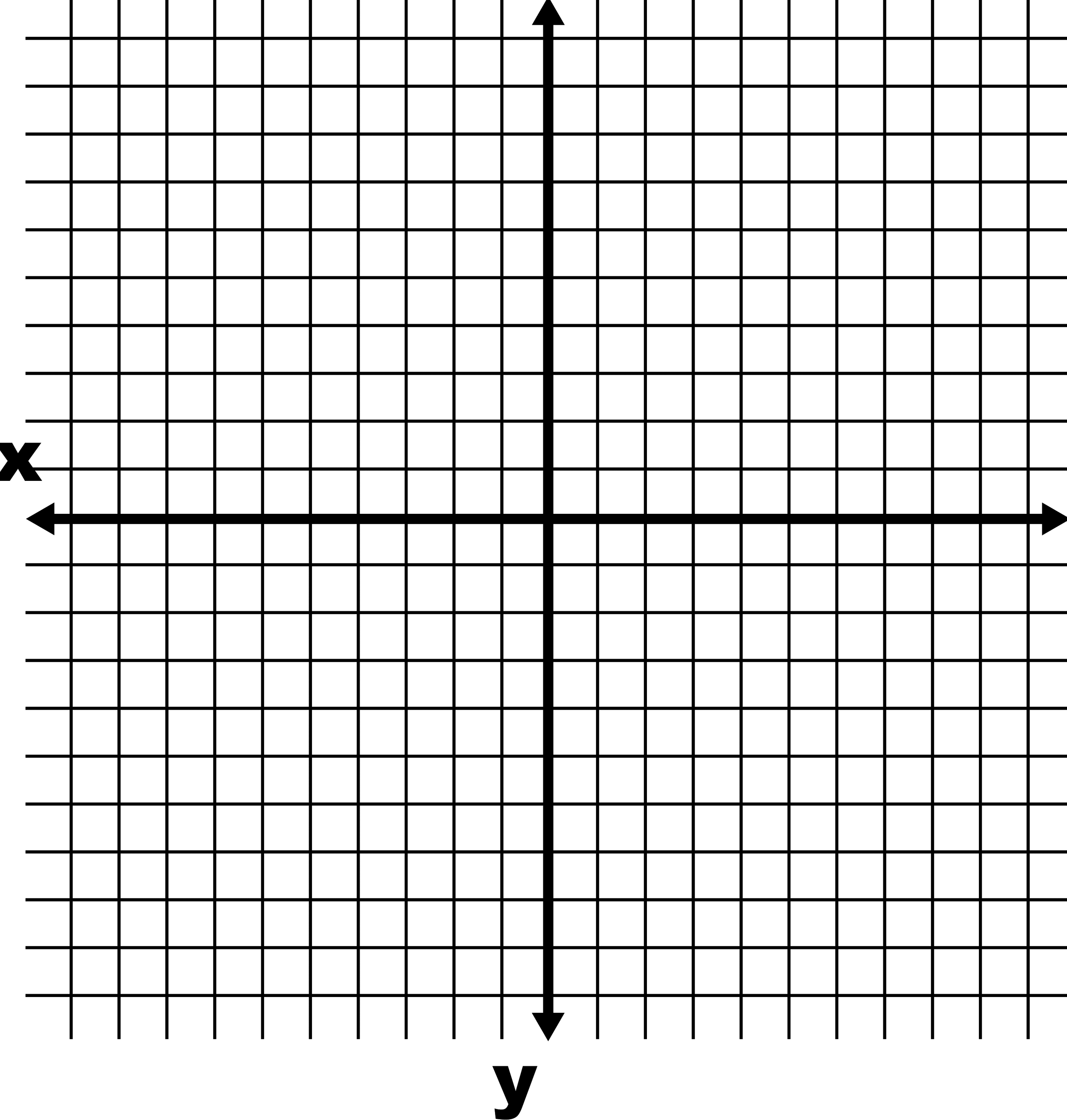
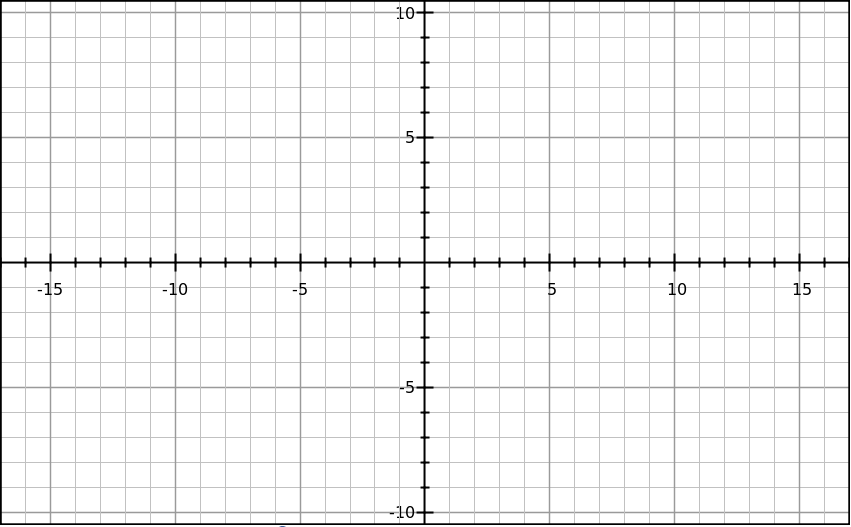
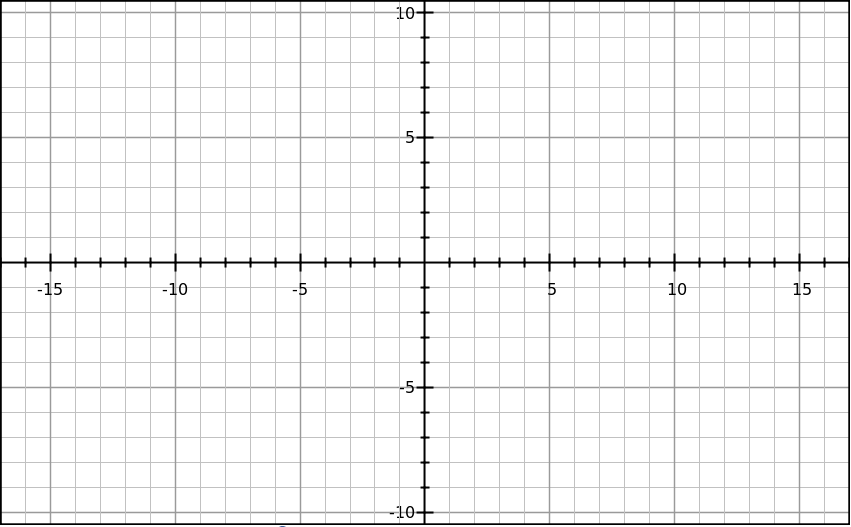
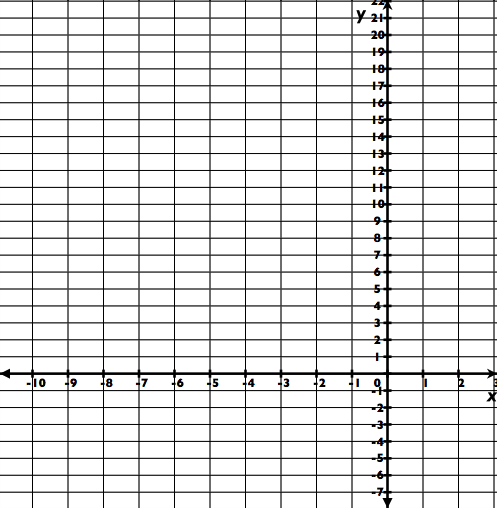
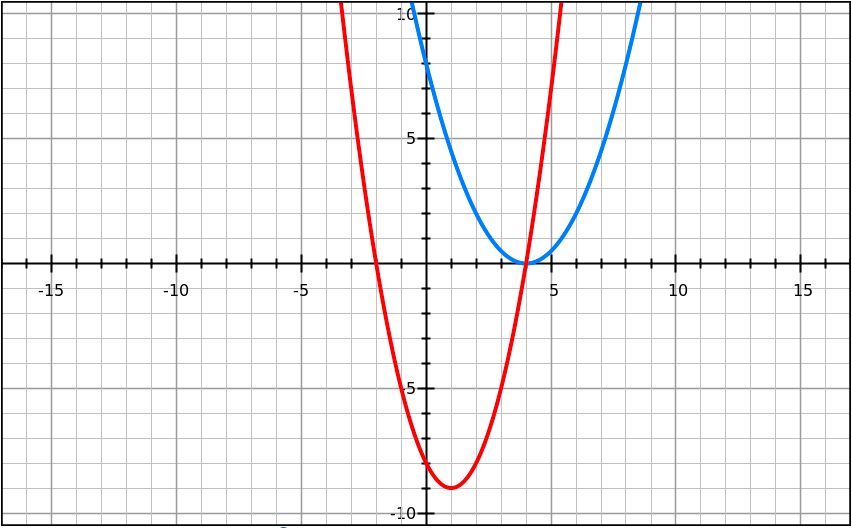
Name:

Date:

**Graphing Quadratic Functions**

1. Graph *y* = -½(*x* – 2)² + 3  
   
2. Graph *y* = 2(*x* + 1)² - 4  
   
3. Graph *g(x) = x*2 -16*x* +55  
   
4. Graph *f(x)* = *x*² - 6*x* + 9  
   
5. Graph 

**Writing the Equations of Graph of Quadratic Functions**



1. Write the equation for each function in **vertex**, **factored**, and **standard** form.

**Graph and write the equation in vertex and standard form of each parabola.**

1. two points on the parabola: (-9, 7) and (2, 7)
2. two points on the parabola: (-7, -4) and (9, -4)



1. two points on the parabola: (3, 5) and (0, ½)



**Questions:**

1. The three forms of quadratic functions are below. For each type, write the formula and tell how you would graph the function.  
   1. Standard form:
   2. Vertex form:
   3. Factored form:
2. What is the basic quadratic pattern that any quadratic function follows from the vertex to the next points? (Hint: over 1, up ?)

**Quadratic Patterns:**Find the equation of each pattern below:



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 |
| y | 194 | 220 | 247 | 275 | 304 |



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 |
| y | 1.5 | 6 | 13.5 | 24 | 37.5 |



|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 |
| y | 25 | 100 | 225 | 400 | 625 |